

Claims

- [c1] An encryption apparatus, comprising:
a plurality of ports to at least one of which a terminal having an encrypting capability can be directly or indirectly connected;
encryption/decryption means for performing an encrypting process and a decrypting process on data to terminate encryption-based security between the terminal having the encrypting capability; and
bridge means for allowing data, which has been received with one of the plurality of ports and then on which the encrypting or decrypting process has been performed, to be outputted as it is from another port without being performed any routing process.
- [c2] The encryption apparatus according to claim 1,
wherein the encryption/decryption means performs the encrypting process and the decrypting process on data, so that the encryption apparatus receives and retransmits data in the form of encrypted data from and to the terminal having the encrypting capability, and the encryption apparatus receives and retransmits the data in the form of non-encrypted data from and to the terminal

having no encrypting capability.

- [c3] An encryption apparatus, comprising:
a plurality of ports to at least one of which a terminal having an encrypting capability can be directly or indirectly connected;
encryption/decryption means for performing an encrypting process or a decrypting process on data which has been received with one of the plurality of ports and then has passed through a physical layer and a data link layer;
and
bridge means for passing the encrypted or decrypted data to the data link layer and the physical layer without passing said data to a network layer in which routing between networks is controlled, and then sending said data to another port so as to be outputted from said port.

- [c4] The encryption apparatus according to claim 3, further comprising setting information storage means for storing setting information for controlling the encrypting process and the decrypting process,
wherein the encryption/decryption means controls the encrypting process and the decrypting process by comparing the setting information stored in the setting information storage means with header information of a data packet of the data received with one of the plurality of ports.

[c5] An encrypting method for performing an encrypting process and a decrypting process using an encryption apparatus, the apparatus having a plurality of ports to at least one of which a terminal having an encrypting capability can be directly or indirectly connected, the method comprising the steps of:
performing the encrypting or decrypting process on data which has been received with one of the plurality of ports and then has passed through a data link layer and a physical layer; and
outputting the encrypted or decrypted data from another port through the data link layer and the physical layer, without passing said data to a network layer in which routing between networks is controlled.

[c6] An encryption system, comprising:
an encryption apparatus according to claim 1; and
a terminal having an encrypting capability which can be connected to the encryption apparatus through a wireless or cable network.

[c7] An encryption system, comprising:
a terminal having an encrypting capability;
a terminal having no encrypting capability; and
an encryption apparatus according to claim 2 which can be connected between the terminal having the encrypting capability and the terminal having no encrypting ca-

pability through a wireless or cable network.

- [c8] The encryption apparatus according to claim 2, wherein the encryption/decryption means performs the decrypting process on encrypted data and then sending said data to a terminal having no encrypting capability when the encryption apparatus receives said encrypted data from another terminal having an encrypting capability and retransmits said data to the terminal having no encrypting capability, and performs the encrypting process on non-encrypted data and then sending said data to a terminal having an encrypting capability when the encryption apparatus receives said non-encrypted data from another terminal having no encrypting capability and retransmits said data to the terminal having the encrypting capability.